

# Exhibit 5



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| APPLICATION NO.         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|-------------|----------------------|---------------------|------------------|
| 11/292,939              | 12/02/2005  | Anton Monk           | EC04007USU          | 2904             |
| 78271                   | 7590        | 02/04/2009           | EXAMINER            |                  |
| The Eclipse Group LLP   |             |                      | ZHAO, WEI           |                  |
| 10605 Balboa Blvd       |             |                      |                     |                  |
| Suite 300               |             |                      | ART UNIT            | PAPER NUMBER     |
| Granada Hills, CA 91344 |             |                      | 2419                |                  |
|                         |             |                      |                     |                  |
|                         |             |                      | MAIL DATE           | DELIVERY MODE    |
|                         |             |                      | 02/04/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

#4181

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 11/292,939             | MONK ET AL.         |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | WEI ZHAO               | 2419                |  |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 02 December 2005.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-46 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-46 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 02 December 2005 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

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## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 12-23 are objected to under 37 CFR 1.75(c) because of the following informalities:

Regarding claim 12, it is suggested to change the term “the Modem subsystem” in line 3 to --- a Modem subsystem ---.

Claims 13-23 are objected to as these claims all depend from claim 12.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 12, 15, 24-25, 35, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Nikolich et al. (US 6,826,195 B1).

Regarding claim 1, Nikolich et al. disclose the BCN modem capable of transmitting packets to a plurality of nodes in a broadband cable network (column [1] lines 42-52), the transmitter comprising: a MAC subsystem capable of providing packets for transmission within the broadband cable network (column

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[9] lines 47-56); a Modem subsystem in signal communication with the MAC subsystem, the Modem subsystem capable of receiving the packets from the MAC subsystem and appending information to the packets (column [1] lines 31-38); and a RF subsystem in signal communication with the Modem subsystem, capable of receiving the packets from the Modem subsystem and upconverting the packets received from the Modem subsystem (column [10] lines 8-26).

Regarding claim 2, Nikolich et al. further disclose the BCN modem, wherein the packet is a data and control packet for transmission within the broadband cable network (column [9] lines 47-56).

Regarding claim 12, it is similar to claim 1. Claim 12 is rejected for the same reasons as to claim 1.

Regarding claim 15, Nikolich et al. disclose the BCN modem, wherein the RF subsystem is capable of receiving a control and data packet (column [10] lines 8-26).

Regarding claims 24-25, these two claims are similar to claims 1-2. Claims 24-25 are rejected for the same reasons as to claim 1.

Regarding claims 35 and 38, these two claims are similar to claims 1 and 15. Claims 35 and 38 are rejected for the same reasons as to claims 1 and 15.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3-9, 13-14, 16-222, 26-32, 36-37, 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich et al. (US 6,826,195 B1) in view of Cafarelli et al. (US 2003/0012163 A1).

Regarding claim 3, Nikolich et al. teach all the subject matter with the exception of implementing the variable length payload. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, wherein the data and control packet has a header and a variable length payload (paragraph [0066] lines 1-20). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of packet having variable length payload, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the variable

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length payload is to carry information that pertains to the specific packet being sent.

Regarding claim 4, Nikolich et al. teach all the subject matter with the exception of implementing the header having at least five fields. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, wherein the header has at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field (paragraph [0066] lines 1-20). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of the header having at least five fields, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the header having at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field is to include specific parameters in the packet header that pertain to a particular service or network functions the packet is implementing.

Regarding claim 5, Nikolich et al. teach all the subject matter with the exception of implementing the variable length payload. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, where the variable length payload carries encrypted data (paragraph [0066] lines

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1-20). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of packet having variable length payload, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the variable length payload is to carry information that pertains to the specific packet being sent.

Regarding claim 6, Nikolich et al. teach all the subject matter with the exception of implementing the variable length payload. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, where the variable length payload carries encapsulated MPEG data (paragraph [0066] lines 1-20). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of packet having variable length payload, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the variable length payload is to carry information that pertains to the specific packet being sent.

Regarding claim 7, Nikolich et al. teach all the subject matter with the exception of implementing the variable length payload. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, where the variable length payload carries encapsulated Ethernet data (paragraph [0066] lines 1-20). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The

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method of Nikolich et al. can be implemented on any type of packet having variable length payload, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the variable length payload is to carry information that pertains to the specific packet being sent.

Regarding claim 8, Nikolich et al. teach all the subject matter with the exception of implementing the beacon packet. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, wherein the packet is a beacon packet for transmission within the broadband cable network (paragraph [0053] lines 1-4). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of beacon packet, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the beacon packet is to provide the packet that contains a timestamp and configuration information about the access point.

Regarding claim 9, Nikolich et al. teach all the subject matter with the exception of implementing the beacon packet. Cafarelli et al. from the same or similar field of endeavor teach implementing fairness of the method, wherein the beacon packet has at least eight fields selected from a group of fields consisting of channel number field, change field, sequence number field, network information field, network coordinator ID field, Next beacon index field, admission frame length field, asynchronous MAP length field, isochronous MAP length field, admission/robust window bit-loading profile field, admission contention index

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field, and a beacon CRC field (paragraph [0053] lines 1-4). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Cafarelli et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of beacon packet, which is taught by Cafarelli et al. The motivation for using the method of Nikolich et al. on implementing the beacon packet is to provide the packet that contains a timestamp and configuration information about the access point.

Regarding claims 13-14, these two claims are similar to claims 8-9. Claims 13-14 are rejected for the same reasons as to claims 8-9.

Regarding claims 17-20, these four claims are similar to claims 4-7. Claims 17-20 are rejected for the same reasons as to claims 4-7.

Regarding claims 21-22, these two claims are similar to claim 3. Claims 21-22 are rejected for the same reasons as to claim 3.

Regarding claims 26-32, these seven claims are similar to claims 3-9. Claims 26-32 are rejected for the same reasons as to claims 3-9.

Regarding claims 36-37, these two claims are similar to claims 8-9. Claims 36-37 are rejected for the same reasons as to claims 8-9.

Regarding claims 39-43, these five claims are similar to claims 3-7. Claims 39-43 are rejected for the same reasons as to claims 3-7.

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7. Claims 10-11, 23, 33-34, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich et al. (US 6,826,195 B1) in view of Diener et al. (US 7,184,777 B2).

Regarding claim 10, Nikolich et al. teach all the subject matter with the exception of implementing the probe packet. Diener et al. from the same or similar field of endeavor teach implementing fairness of the method, wherein the packet is a probe packet for transmission within the broadband cable network (column [12] line 56 – column [13] line 4). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Diener et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of probe packet, which is taught by Diener et al. The motivation for using the method of Nikolich et al. on implementing the probe packet is to trend information to detect suspicious protocol usage.

Regarding claim 11, Nikolich et al. teach all the subject matter with the exception of implementing the probe packet. Diener et al. from the same or similar field of endeavor teach implementing fairness of the method, further including a diversity mode for transmission of the probe packet (column [12] line 56 – column [13] line 4). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Diener et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of probe packet, which is taught by Diener et al. The motivation for using the method of Nikolich et

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al. on implementing the probe packet is to trend information to detect suspicious protocol usage.

Regarding claim 23, this claim is similar to claim 10. Claim 23 is rejected for the same reasons as to claim 10.

Regarding claims 33-34, these two claims are similar to claims 10-11. Claims 33-34 are rejected for the same reasons as to claims 10-11.

Regarding claim 44, Nikolich et al. teach all the subject matter with the exception of implementing the probe packet. Diener et al. from the same or similar field of endeavor teach implementing fairness of the method, where receiving packets includes receiving a probe packet (column [12] line 56 – column [13] line 4). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Diener et al. in the system of Nikolich et al. The method of Nikolich et al. can be implemented on any type of probe packet, which is taught by Diener et al. The motivation for using the method of Nikolich et al. on implementing the probe packet is to trend information to detect suspicious protocol usage.

Regarding claim 45, Nikolich et al. teach all the subject matter with the exception of implementing the probe packet. Diener et al. from the same or similar field of endeavor teach implementing fairness of the method, where receiving the probe packet at the RF system further includes receiving the probe packet sent in a look back mode from the BCN modem (column [12] line 56 – column [13] line 4). Thus, it would have been obvious to one of ordinary skill in

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the art to implement the method of Diener et al. in the system of Nikolich et al.

The method of Nikolich et al. can be implemented on any type of probe packet, which is taught by Diener et al. The motivation for using the method of Nikolich et al. on implementing the probe packet is to trend information to detect suspicious protocol usage.

Regarding claim 46, this claim is similar to claim 10. Claim 46 is rejected for the same reasons as to claim 10.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beshai (US 2002/0080790 A1) is cited to show a method for universal transfer mode of transferring data packets at a regulated bit rate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI ZHAO whose telephone number is (571)270-5672. The examiner can normally be reached on Monday-Thursday, 8:00am-12:00noon.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wei Zhao  
Examiner  
Art Unit 2419

/W. Z./  
Examiner, Art Unit 2419  
/DANG T TON/  
Supervisory Patent Examiner, Art Unit 2419/D. T. T./  
Supervisory Patent Examiner, Art Unit 2419

AMENDMENTS TO THE CLAIMS:

1. **(Currently Amended)** A Broadband Cable Network (BCN) modem having a transmitter that transmits packets to a plurality of nodes in a broadband cable network, the transmitter comprising:
  - a MAC subsystem that provides the packets for transmission within the broadband cable network;
  - a Modem subsystem in signal communication with the MAC subsystem, the Modem subsystem receiving the packets from the MAC subsystem and appending information to the packets; and
  - a RF subsystem in signal communication with the Modem subsystem, that receives the packets from the Modem subsystem and upconverting the packets received from the Modem subsystem;wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon Cyclic Redundancy Checking (CRC) field; and
  - wherein at least one of the packets is a data and control packet having a header and a variable length payload and wherein the header has at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field.

2-11. **(Previously Cancelled)**

12. **(Currently Amended)** A Broadband Cable Network (BCN) modem having a receiver that receives packets from a plurality of nodes in a broadband cable network, the receiver comprising:

a RF subsystem that receives packets and downconverting the packets wherein at least one of the packets is a control and data packet having a header, the header having at least five fields selected from a group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field, the control and data packet further having a variable length payload;

a Modem subsystem in signal communication with the RF subsystem, the Modem subsystem receiving the packets and removing control information from the packets; and

a MAC subsystem that receives packets within the broadband cable network and retrieving data for use by the BCN modem;

wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon Cyclic Redundancy Checking (CRC) field.

**13 - 23. (Previously Cancelled)**

24. **(Currently Amended)** A method for transmitting packets from a Broadband Cable Network (BCN) modem to a plurality of nodes in a broadband cable network, the method comprising:

formatting the packets in a MAC subsystem that transmits the packets within the broadband cable network, including formatting a data and control packet for transmission within the broadband cable network, the data and control packet having a header and a variable length payload, the header having at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field;

receiving the packets from the MAC subsystem at a Modem subsystem that is in signal communication with the MAC subsystem and that appends information to the packets; and

upconverting the packets with the information for transmission via the broadband cable network at a RF subsystem that is in signal communication with the Modem subsystem;

wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon Cyclic Redundancy Checking (CRC) field.

**25-34. (Previously Cancelled)**

35. **(Currently Amended)** A method for receiving packets at a receiver in a Broadband Cable Network (BCN) modem from at least one node in a broadband cable network, the method comprising:

receiving the packets and downconverting the packets at a RF subsystem including a control and data packet having a header that has at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field and variable length payload;

removing control information from the packets in a Modem subsystem that is in signal communication with the RF subsystem; and

retrieving data for use by the BCN modem at a MAC subsystem that is in signal communication with the Modem subsystem and in receipt of the packet with the control information removed;

wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next

beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon Cyclic Redundancy Checking (CRC) field.

36-46. (Previously Cancelled)

REMARKS/ARGUMENTS

Claims 1, 12, 24, and 35 are pending in the application. Claims 1, 12, 24, and 35 were rejected. Claims 1, 12, 24 and 35 have been amended. Applicants respectfully request reconsideration and allowance of all pending claims.

**Discussion of Rejections Under 37 CFR 1.75**

The Examiner has objected to Claims 1, 12, 24 and 35 under 37 CFR 1.75(c). Applicants have amended each such claim. As such, Applicants respectfully traverse the Examiner's objections under 37 CFR 1.75(c).

**Discussion of Rejections Under 35 U.S.C. §103**

The Examiner rejected Claims 1, 12, 24 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich et al. (US 6,826,195 B1) in view of the prior art disclosed in the Background of the Invention of Nikolich et al. and Dunn et al. (US 4,761,796), and further in view of Cafarelli et al. (US 2003/0012163 A1).

The Examiner contends that Cafarelli et al. teaches that at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon CRC field (paragraph [0053] lines 1-4). Applicants take issue with the Examiner's characterization of what is taught by Cafarelli.

Paragraph [0053] of Cafarelli states:

Beacon frame: In an infrastructure network, an access point periodically sends a Beacon frame that contains a timestamp and configuration information about the access point.

Clearly, there is nothing in this paragraph that teaches or suggests the channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon CRC field recited in claims such as Claim 1. That is, none of the fields recited in claims such as Claim 1 are either a timestamp or "configuration information about the access point". Furthermore, none of the other references that are cited by the Examiner teach or

suggest these missing limitations (i.e., the missing fields recited in claims such as Claim 1). For at least this reason, Applicants respectfully traverse the Examiner's rejection of Claim 1.

The Examiner rejected Claims 12, 24 and 25 using the same grounds used for his rejection of Claim 1. Applicants traverse these rejections for at least the reason recited above for traversing the Examiner's rejection of Claim 1.

CONCLUSION

Applicants believe that all claims pending in the application are allowable. Furthermore, Applicants contend that no new limitation have been added to the claims presented. Applicants respectfully request that a timely Notice of Allowance be issued in this case.

This is a response to the Office Action mailed on January 20, 2011, and as such, is submitted timely.

If there are any other fees due in connection with the filing of the response, please charge the fees to our Deposit Account No. 50-4613. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

Dated: April 18, 2011

By: /Bruce W. Greenhaus/  
Bruce W. Greenhaus  
Attorney for Applicants  
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## UNITED STATES PATENT AND TRADEMARK OFFICE

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

77330      7590      08/18/2011  
**ENTROPIC COMMUNICATIONS, INC.**  
 6290 SEQUENCE DRIVE  
 SAN DIEGO, CA 92121

|           |              |
|-----------|--------------|
| EXAMINER  |              |
| ZHAO, WEI |              |
| ART UNIT  | PAPER NUMBER |
| 2475      |              |

DATE MAILED: 08/18/2011

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/292,939      | 12/02/2005  | Anton Monk           | E040004USU4         | 2904             |

TITLE OF INVENTION: MULTIMEDIA OVER COAXIAL CABLE ACCESS PROTOCOL

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510        | \$0                 | \$0                  | \$1510           | 11/18/2011 |

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

**HOW TO REPLY TO THIS NOTICE:****I. Review the SMALL ENTITY status shown above.**

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

**II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.**

**III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.**

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - FEE(S) TRANSMITTAL

#4201

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

77330      7590      08/18/2011  
**ENTROPIC COMMUNICATIONS, INC.**  
6290 SEQUENCE DRIVE  
SAN DIEGO, CA 92121

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/292,939      | 12/02/2005  | Anton Monk           | E040004USU4         | 2904             |

TITLE OF INVENTION: MULTIMEDIA OVER COAXIAL CABLE ACCESS PROTOCOL

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE  | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|----------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510         | \$0                 | \$0                  | \$1510           | 11/18/2011 |
| EXAMINER       | ART UNIT     | CLASS-SUBCLASS |                     |                      |                  |            |
| ZHAO, WEI      | 2475         | 370-419000     |                     |                      |                  |            |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev.03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted:

- Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.        |
|-----------------|-------------|----------------------|---------------------|-------------------------|
| 11/292,939      | 12/02/2005  | Anton Monk           | E040004USU4         | 2904                    |
| 77330           | 7590        | 08/18/2011           | EXAMINER            |                         |
|                 |             |                      | ZHAO, WEI           |                         |
|                 |             |                      | ART UNIT            | PAPER NUMBER            |
|                 |             |                      | 2475                |                         |
|                 |             |                      |                     | DATE MAILED: 08/18/2011 |

**Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 413 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 413 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## **Privacy Act Statement**

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

#4204

|                          |                        |                     |  |
|--------------------------|------------------------|---------------------|--|
| <b>Interview Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                          | 11/292,939             | MONK ET AL.         |  |
|                          | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                          | WEI ZHAO               | 2475                |  |

All participants (applicant, applicant's representative, PTO personnel):

(1) WEI ZHAO. (3) \_\_\_\_.

(2) BRUCE W. GREENHAUS. (4) \_\_\_\_.

Date of Interview: 28 June 2011.

Type: a) Telephonic b) Video Conference  
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.

If Yes, brief description: \_\_\_\_.

Claim(s) discussed: \_\_\_\_.

Identification of prior art discussed: of the records.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The specification is amended as follows:

The term "FIG. 22" in both paragraph [044] and paragraph [0153] has been changed to "FIG. 22A&B".

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

|  |  |
|--|--|
| /Wei Zhao /<br>Examiner, Art Unit 2475 |  |
|--|--|

**Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record**

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

**Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews**  
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

**37 CFR §1.2 Business to be transacted in writing.**

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

**Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Application/Control Number: 11/292,939  
Art Unit: 2475

Page 2

**DETAILED ACTION**

***Examiner's Amendment***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bruce W. Greenhaus, Reg. No. 37,339 on June 28, 2011.

The specification is amended as follows:

The term "FIG. 22" in both paragraph [044] and paragraph [0153] has been changed to "FIG. 22A&B".

***Allowable Subject Matter***

2. Claims 1, 12, 24 and 35 are allowed.

Regarding claim 1, the prior art, in single or in combination, fails to teach "A Broadband Cable Network (BCN) modem having a transmitter that transmits packets to a plurality of nodes in a broadband cable network, the transmitter comprising: a MAC subsystem that provides the packets for transmission within the broadband cable network; a Modem subsystem in signal communication with the MAC subsystem, the Modem subsystem receiving the packets from the MAC subsystem and appending

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Art Unit: 2475

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packets; and a MAC subsystem that receives packets within the broadband cable network and retrieving data for use by the BCN modem; wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP length field and a beacon Cyclic Redundancy Checking (CRC) field” in combination with other limitation of the claim(s).

Regarding claim 24, the prior art, in single or in combination, fails to teach “A method for transmitting packets from a Broadband Cable Network (BCN) modem to a plurality of nodes in a broadband cable network, the method comprising: formatting the packets in a MAC subsystem that transmits the packets within the broadband cable network, including formatting a data and control packet for transmission within the broadband cable network, the data and control packet having a header and a variable length payload, the header having at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field; receiving the packets from the MAC subsystem at a Modem subsystem that is in signal communication with the MAC subsystem and that appends information to the packets; and upconverting the packets with the information for transmission via the broadband cable network at a RF subsystem that is in signal communication with the Modem subsystem; wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission frame length field, admission window, asynchronous MAP

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Page 5

length field and a beacon Cyclic Redundancy Checking (CRC) field" in combination with other limitation of the claim(s).

Regarding claim 35, the prior art, in single or in combination, fails to teach "A method for receiving packets at a receiver in a Broadband Cable Network (BCN) modem from at least one node in a broadband cable network, the method comprising: receiving the packets and downconverting the packets at a RF subsystem including a control and data packet having a header that has at least five fields selected from the group consisting of a transmit clock field, packet type field, packet subtype field, version field, source node ID field, destination node ID field, and header check sequence field and variable length payload; removing control information from the packets in a Modem subsystem that is in signal communication with the RF subsystem; and retrieving data for use by the BCN modem at a MAC subsystem that is in signal communication with the Modem subsystem and in receipt of the packet with the control information removed; wherein at least one of the packets is a beacon packet that has a channel number field, change field, sequence number field, network coordinator ID field, next beacon index field, admission flame length field, admission window, asynchronous MAP length field and a beacon Cyclic Redundancy Checking (CRC) field" in combination with other limitation of the claim(s).

***Conclusion***

Application/Control Number: 11/292,939  
Art Unit: 2475

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI ZHAO whose telephone number is (571)270-5672. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wei Zhao  
Examiner  
Art Unit 2475

/Wei Zhao/  
Examiner, Art Unit 2475

/DANG T TON/  
Supervisory Patent Examiner, Art Unit 2475/D. T./  
Supervisory Patent Examiner, Art Unit 2475

| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|-------------------------------|------------------------|---------------------|
|                               | 11/292,939             | MONK ET AL.         |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |
|                               | WEI ZHAO               | 2475                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 4/18/2011.
2.  The allowed claim(s) is/are 1, 12, 24 and 35 (renumbered 1-4 respectively).
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 6/28/2011.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

Wei Zhao  
Examiner  
Art Unit: 2475

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